

[FIFO MEMORY WITH ECC FUNCTION]

Abstract of Disclosure

A first-in-first-out (FIFO) semiconductor memory with error correction code (ECC) function is provided. A check code is generated by computing an input data in an ECC encoder unit before the input data is written into the FIFO memory. The check code is stored inside the FIFO memory together with the input data. The error bits in the input data will be checked and corrected using the check code stored inside the FIFO memory while the input data is read from the FIFO memory so that input data are unaffected by noise and data integrity is maintained.

Figures